# United States Patent [19]

## Lowenthal et al.

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[54]	KEYBOARD SCANNING AND INTERFACE
	METHOD AND CIRCUIT

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U.S. Cl. ...... 340/365 S; 340/365 E;

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364/200 MS File, 900 MS File

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#### [57] **ABSTRACT**

A method and apparatus is disclosed for allowing simultaneous depression or chording of a multiple number of keys on a keyboard coupled through an interface circuit to a computer operating system. An arbitrary association can be made to the chord which is distinct from the association made with its component keys. A dedicated processor system in the keyboard peripheral scans and stores in a dedicated memory the identity of all keys detected in the depressed state during the scan of the keyboard. For transmission to the computer operating system, each key depression detected during the scan is represented as an 8-bit binary component and the most significant bit of each binary component is set to the same one of the two permissible binary values, except for the most significant bit of the binary component representing the last depressed key detected during the scan of the keyboard. The most significant bit of that component is set to other of the two permissible binary values.

### 14 Claims, 4 Drawing Figures

